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10/617,909	07/11/2003	Richard Mousseau	BEAS-01076US1	4228

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EXAMINER	
CAO, DIEM K	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/617,909	MOUSSEAU ET AL.	
	Examiner	Art Unit	
	Diem K. Cao	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/25/2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,16-25,27-29 and 33-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,16-25,27-29 and 33-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/5/07,9/25/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 16-25, 27-29 and 33-41 are pending. Applicant has amended claims 1 and 33-36, canceled claims 2-15, 26, 30-32 and added new claims 37-41

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 27-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 37-38 are directed to computer programs, i.e., software per se, which are not physical "things". They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed storage computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.

Claim Objections

4. Claims 19-22 are objected to because of the following informalities: claim 19 recites "a connection manager", the or said should be used because "a connection manager" is already cited in claim 1 which claim 19 depends on.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 16-25, 27-29 and 33-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rana et al. (Java Function) in view of Bea System (WebLogic Server 6.1).

As to claim 1, Rana teaches a system for improved implementation of J2EE connector architecture on an application server, comprising:

- a resource adapter for an Enterprise Information System (resource adapter; page 4, paragraph 3),

- a set of system-level contracts between the resource adapter and an application server (System contracts; page 4, paragraphs 2-6),

- a Common Client Interface capable of providing a client API for Java applications and

development tools to access the resource adapter (Common Client Interface; page 6, section "Common Client Interface"),

- a connection manager on the application server capable of managing and maintaining size of a pool of connections to the Enterprise Information System (The connection manager ... managing a pool of such connection; page 4, section 'System contracts'), wherein the connection manager matches a request for a new connection to the Enterprise Information System, through the resource adapter, with an existing and available managed connection in the pool of connection (Application components request connections to an EIS through a resource adapter, the application server, on receiving a connection creation request, performs a look up in its pool of connections. If the application server finds a matching connection in the pool, then it uses it to satisfy the connection request; page 4, section 'System contracts'), and wherein the connection manager creates a managed connections when an existing and available managed connection is not found (If there is not connection in the pool that can satisfy the connection request, the application server requests the resource adapter to create a new physical link to the underlying EIS; page 4, section 'System contracts'), and

- a set of packaging and development interfaces that provide the ability for resource adapters to plug into J2EE applications in a modular manner (Deployment and packaging protocol; page 6, section "Deployment and packaging protocol", and section "Development with J2EE Connectors").

Rana does not teach creates a plurality of managed connections. However, Bea System teaches creates a plurality of managed connections (Number of managed connections WebLogic Server attempts to allocate when filling a request for a new connection; chapter "Configuration",

page 8, section "Configurable weblogic-ra.xml Entities").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Bea System to the system of Rana because Bea System teaches more than one connections can be created instead of only one as used to before, so the next time, in response to the request, available connection can be used to return instead of creating a new one, thus improve the performance of the system.

As to claim 16, Rana does not teach a deployment component adapted to automatically detect and deploy a resource adapter on the application server. Bea System teaches a deployment component adapted to automatically detect and deploy a resource adapter on the application server (The application directory is monitored during runtime of the WebLogic server and detects if a new .rar is added (causing deployment); chapter "Resource Adapter Deployment", page 3, section Using the Applications Directory). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Bea System to the system of Rana because Bea System teaches a method to deploy a resource adapter automatically while the application server is running, and avoid the problem of stopping the application server (chapter "Resource Adapter Deployment", page 3, section Using the Applications Directory).

As to claim 17, Rana does not teach the resource adapter further provides support for error logging and tracing. However, Bea System teaches teach the resource adapter further provides support for error logging and tracing (A resource adapter is required ... getLogWriter; chapter "Writing J2EE Connector Architecture – Compliant Resource Adapter", page 2, lines 1-

4).

As to claim 18, Rana does not teach a deployment descriptor containing a logging-enabled element capable of indicating whether the logging is enabled, as well as a log-filename element capable of specifying the name of the file in which to write the logging information. However, Bea System teaches a deployment descriptor containing a logging-enabled element capable of indicating whether the logging is enabled, as well as a log-filename element capable of specifying the name of the file in which to write the logging information (Flag to indicate ... ManagedConnection; chapter "Configuration", page 9, lines 8-9).

As to claim 19, Rana does not teach the connection manager for enabling the resource adapter to provide services specific to the resource adapter, the services being selected from the group consisting of connection pooling, error logging and tracing, and security management. However, Bea System teaches a connection manager for enabling the resource adapter to provide services specific to the resource adapter, the services being selected from the group consisting of connection pooling, error logging and tracing, and security management (chapter "Configuration", pages 8-9, section "Configuring weblogic-ra.xml Entities").

As to claim 20, Rana teaches the connection manager can create physical connections to the underlying Enterprise Information System (The connection manager ... to an EIS; page 4, paragraph 7).

As to claim 21, Rana does not explicitly teach the resource adapter is capable of having more than one connection manager instance per physical connection. However, Bea System teaches the resource adapter is capable of having more than one connection manager instance per physical connection (a resource adapter may ... and components; chapter "Writing J2EE Connector Architecture – Compliant Resource Adapter", page 2, paragraph 6).

As to claim 22, Rana does not explicitly teach a deployment descriptor specific to the resource adapter allowing the resource adapter to be linked to a second resource adapter, the resource adapter capable of sharing resources with the second resource adapter, thereby preventing the duplication of resources and only requiring the resource adapter to modify a subset of resource adapter attributes. However, Bea System teaches deployment descriptor specific to the resource adapter allowing the resource adapter to be linked to a second resource adapter, the resource adapter capable of sharing resources with the second resource adapter, thereby preventing the duplication of resources and only requiring the resource adapter to modify a subset of resource adapter attributes (chapter "Overview of the WebLogic J2EE Connector Architecture", page 6, paragraph 3 and chapter Configuration, page 5, section "Configuring the ra-link-ref Element").

As to claim 23, Rana teaches a deployment descriptor for the resource adapter (Deployment descriptor; page 6, section "Deployment and packaging protocol"), wherein the set of system-level contracts includes a connection management contract (page 4, paragraph 6).

Rana does not teach the deployment descriptor contains connection pool parameters

capable of setting parameters selected from the group consisting of: the initial number of managed connections the application server attempts to allocate at deployment time, the maximum number of managed connections the application server allows to be allocated at any one time, the number of managed connections the application server attempts to allocate when filling a request for a new connection, whether the application server attempts to reclaim unused managed connections to save system resources, the time the application server waits between attempts to reclaim unused managed connections, the frequency of time to detect and reclaim connections hat have exceeded their usage time, and the amount of usage time allowed for a connection. Bea System teaches the deployment descriptor contains connection pool parameters capable of setting parameters selected from the group consisting of: the initial number of managed connections the application server attempts to allocate at deployment time, the maximum number of managed connections the application server allows to be allocated at any one time, the number of managed connections the application server attempts to allocate when filling a request for a new connection, whether the application server attempts to reclaim unused managed connections to save system resources, the time the application server waits between attempts to reclaim unused managed connections, the frequency of time to detect and reclaim connections hat have exceeded their usage time, and the amount of usage time allowed for a connection (chapter Configuration, page 5, Listing 2-1 weblogic-ra.xml default values and pages 8-9, section "Configurable weblogic-ra.xml Entities").

As to claim 24, Rana teaches a deployment descriptor for the resource adapter (deployment descriptor; page 6, section "Deployment and packaging protocol"). Rana does not

teach the deployment descriptor containing an initiating principal mapping, the mapping capable of being used at deployment time if connection pool parameters indicate that the application server should initialize connections. However, Bea System teaches the deployment descriptor containing an initiating principal mapping, the mapping capable of being used at deployment time if connection pool parameters indicate that the application server should initialize connections (chapter "Configuration", page 9, section "Configuring the Security Principal Map").

As to claim 25, Bea System teaches a security principal map for each deployed resource adapter, the map providing a mechanism to define appropriate resource principal values for resource adapter and Enterprise Information sign-on processing (chapter "Security", page 2, section "Security Principal Map").

As to claim 33, Rana as modified by Bea System teach the connection manager creates each of the plurality of managed connections using the initiating principal and client request information contained in the request for a new connection (see Rana, page 4, paragraph 7 and Bea System, chapter Configuration, page 5, Listing 2-1 weblogic-ra.xml default values and pages 8-9, section "Configurable weblogic-ra.xml Entities").

As to claim 34, Rana as modified by Bea System teaches the connection manager attempts to recycle a managed connection from the connection pool if a maximum number of

connections are created (see Bea System, chapter "Configuration", page 8, section "Configurable weblogic-ra.xml Entities").

As to claim 35, Rana as modified by Bea System teaches the connection manager monitors the activity of managed connections in the connection pool during the deployment of a resource adapter, the connection manager being capable of reducing the size of the connection pool if connection usage decreases and remains at the decreased level over a period of time (see Bea System, chapter Configuration, page 5, Listing 2-1 weblogic-ra.xml default values and pages 8-9, section "Configurable weblogic-ra.xml Entities").

As to claim 36, Rana as modified by Bea System teaches the connection manager automatically closes a managed connection that has exhausted its usage time (see Bea System, reclaim unused managed connections to save system resource; chapter Configuration, page 5, Listing 2-1 weblogic-ra.xml default values and pages 8-9, section "Configurable weblogic-ra.xml Entities").

As to claim 37, Rana does not teach wherein transaction level type supported by the resource adapter is specified by an element in a deployment descriptor. However, Rana teaches there is a deployment descriptor for a resource adapter (page 6). Bea System teaches wherein transaction level type supported by the resource adapter is specified by an element in a deployment descriptor (see section "Transaction Management", page 2, chapter "Writing J2EE Connector Architecture – Compliant Resource Adapters").

As to claim 38, Bea System teaches wherein the transaction level type supported by the resource adapter is specified as XA transaction, local transaction, or no transaction (Level NoTransaction, Level LocalTransaction, Level XATransaction; see section "Transaction Management", pages 2-3, chapter "Writing J2EE Connector Architecture – Compliant Resource Adapters").

As to claim 39, Bea System teaches wherein an element in the deployment descriptor sets the frequency for calculating connection pool size reduction (The Time WebLogic Server waits between attempts to reclaim unused managed connections; chapter "Configuration", page 8, section "Configurable weblogic-ra.xml Entities").

As to claim 40, Bea System teaches wherein an element in the deployment descriptor sets the frequency for calculating whether a connection has exceeded its usage time (The frequency of time to detect and reclaim connections that have exceeded their usage time; chapter "Configuration", pages 8-9, section "Configurable weblogic-ra.xml Entities").

As to claim 41, Bea System teaches wherein an element in the deployment descriptor sets the maximum usage time for a connection (The amount of usage time allowed for a connection; chapter "Configuration", pages 8-9, section "Configurable weblogic-ra.xml Entities").

As to claim 27, Rana teaches a system for improved implementation of a J2EE connector architecture on an application server, comprising:

- a resource adapter for an Enterprise Information System (resource adapter; page 4, paragraph 3);
- a deployment descriptor containing deployment elements for the resource adapter (The RAR file ... deployment descriptor ... at the deployment time; page 6, section "Deployment and packaging protocol");
- a set of system-level contracts between the resource adapter and an application server (System contracts; page 4, paragraphs 2-6), the set including a security management contract (security contract; page 4, paragraphs 2-6 and page 5, paragraph 5);
- a Common Client Interface capable of providing a client API for Java applications and development tools to access the resource adapter (Common Client Interface; page 6, section "Common Client Interface"), and
- a set of packaging and development interfaces that provide the ability for resource adapters to plug into J2EE applications in a modular manner (Deployment and packaging protocol; page 6, section "Deployment and packaging protocol", and section "Development with J2EE Connectors").

Rana does not teach a password converter tool capable of being used with the security management contract to encrypt any passwords in the deployment descriptor. However, Bea System teaches a password converter tool capable of being used with the security management contract to encrypt any passwords in the deployment descriptor (see section "Using the Password Converter Tool"; page 10, chapter "Configuration").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Bea System to the system of Rana because Bea System provides a details how security management contrast is implemented in the WebLogic.

As to claim 28, Rana does not teach wherein the password converter tool is further adapted to parse an existing deployment descriptor containing non-encrypted passwords and create a new deployment descriptor containing encrypted passwords. However, Bea System teaches wherein the password converter tool is further adapted to parse an existing deployment descriptor containing non-encrypted passwords and create a new deployment descriptor containing encrypted passwords (You must run the provided password converter tool ... new file that you package in the .rar file for deployment to WebLogic Server; chapter "Configuration", page 10).

Response to Arguments

7. Applicant's arguments filed 9/25/2007 have been fully considered but they are not persuasive.

As to Applicant's arguments regarding WebLogic Server 6.1 was not described in a printed publication more than one year prior to the date of the application for patent, and therefor WebLogic 6.1 can not be combined with Rana to make a 103(a) rejection (page 9, last paragraph), examiner respectfully disagrees. The WebLogic 6.1 is qualified under 102(a), not under 102 (e), (f) or (g), and thus, it is permitted to combine with Rana to make a 103(a) rejection. Therefore, the arguments are not persuasive.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 8:30AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC
November 30, 2007

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER